

Reg. No.....

Name.....

**M. SC. DEGREE END SEMESTER EXAMINATION - NOVEMBER 2017****SEMESTER – 1: BOTANY****COURSE: 16P1BOTT01: MICROBIOLOGY AND PHYCOLOGY**

Time: Three Hours

Max. Marks: 75

I. Answer **any eight** questions briefly; each question carries 2 marks

1. What is 'eye spot'?
2. What is heterotrichous habit?
3. What is isogamy? Give example.
4. What are fossil algae?
5. Bring out the major criteria for algal classification.
6. Comment on the role of algae in symbiotic association.
7. What are viroids? Name two plant disease caused by them.
8. Give an account on Actinomycetes.
9. Briefly describe the ultra structure of flagellum of bacteria.
10. Write an account on Biofertilizers.
11. Give an account on viral genome.
12. Give an account on various culture media for bacteria.

(2 x 8 = 16)

II. Answer **any seven** questions; each question carries 5 marks

13. Compare the different life histories in algae.
14. Explain the contribution of phycologists in India.
15. Explain the ecological importance of Algae.
16. Explain various methods and techniques of collection, preservation and staining of Algae.
17. Explain the Bergey's manual of systematic bacteriology.
18. Write a brief account of the economic importance of Red Algae.
19. What are plasmids? Enumerate its biological significance.
20. Explain the importance of microbiology in modern industry
21. What are the different methods of isolation of pure culture of bacteria?
22. Explain various types of sub viral particles

(5 x 7 = 35)

III. Answer **any two** questions; each question carries 12 marks

23. Write an essay on the different methods of reproduction and evolution of sex organs in Algae

OR

24. Explain the origin of higher plant groups from algae, citing suitable examples.

25. With the help of illustrations write an essay on genetic recombination in bacteria.

OR

26. Write an essay on the nomenclature and classification of viruses. Add a note on symmetry of plant viruses with examples. (12 x 2 = 24)

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